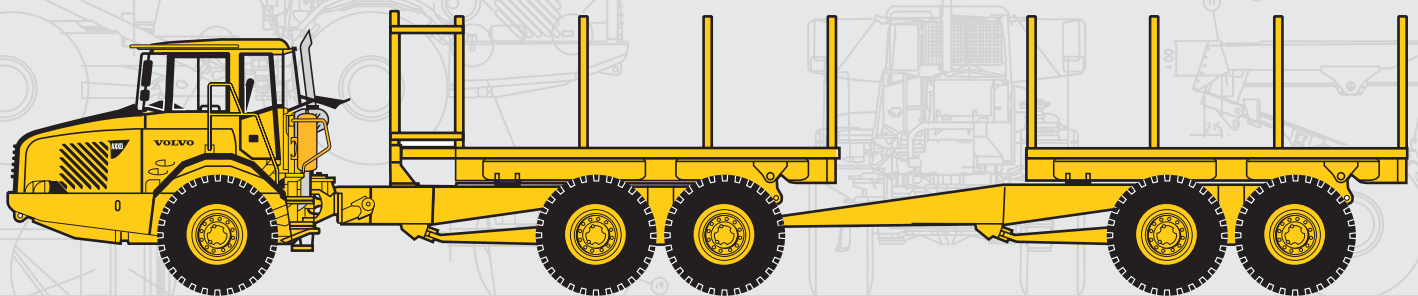


VOLVO ARTICULATED HAULER

A25D/A30D

TIMBER HAULER



- **Engine output:**
A25D s/n 13001-
SAE J1995, Gross 224 kW (305 hp)
SAE J1349, Net 223 kW (303 hp)
A30D s/n 12001-
SAE J1995, Gross 252 kW (343 hp)
SAE J1349, Net 251 kW (341 hp)
- **Maximum rimpull:**
A25D: 25 000 kp
A30D: 26 000 kp
- **Load capacity:**
A25D: 46,0 t
A30D: 53,5 t
- **Maximum speed:** 53 km/h
- **Volvo cab**, designed for high operator visibility, ergonomics and comfort.
- **Reduced maintenance time**, no daily or weekly grease points.
- **Electronic Operator's Communication System**
- **Volvo high performance – low emission**, electronically controlled, direct injected, turbocharged, intercooled diesel engine.
- **Fully automatic planetary transmission**, electronically controlled.
- **Hydraulic retarder** integral in transmission.
- **Dropbox with longitudinal differential lock**
- **100% lock-up differentials.** One longitudinal and three transverse differential locks.
- **Front axle with three-point suspension.**
- **Volvo terrain bogie**, individually oscillating axles and high ground clearance.
- **Volvo Load & Dump Brake.**

VOLVO

The A25D - A30D Timber Hauler in detail

Service

The computerized information system monitors all fluid levels, minimizing daily and weekly service times.

Time to next service and the status of vital vehicle systems is shown to the operator on a display in the instrument panel.

Service accessibility: Fold down front grill with access ladder to remote filter bank, located in front of engine.

Large, 90° opening hood for total engine access.

Remote drain hoses and swing out radiator for easy cleaning.

Fill capacities

Crankcase.....	40 l
Fuel tank.....	400 l
Cooling system	115 l
Transmission total	41 l
Dropbox.....	8,5 l
Axles, front/ rear.....	33 l
First bogie axle	34 l
Hydraulic tank	175 l

Engine

Volvo inline 6-cylinder, direct injected electronic controlled, turbocharged, intercooled 4-cycle low emission diesel engine with wet replaceable cylinder linings.

Fan: Hydrostatically driven, thermostatically controlled variable speed radiator fan consuming power only when needed.

Engine brake: Exhaust retarder.

A25D

Make, model	Volvo D9AAAE2*
Make, model	Volvo D9AABE2**
Max power at	35 r/s (2 100 r/min)
SAE J1995 Gross	224 kW (305 hp)
Flywheel power at	35 r/s (2 100 r/min)
SAE J1349 Net, DIN 6271***	223 kW (303 hp)
Max torque at	20 r/s (1 200 r/min)
SAE J1995 Gross	1 700 Nm
SAE J1349 Net, DIN 6271***	1 689 Nm
Displacement total	9,4 l

With fan operating at full speed, the flywheel power is 210 kW (285 hp) and maximum torque is 1 589 Nm which corresponds to DIN 70020.

A30D

Make, model	Volvo D9AAAE2*
Make, model	Volvo D9AADE2**
Max power at	31,7 r/s (1 900 r/min)
SAE J1995 Gross	252 kW (343 hp)
Flywheel power at	31,7 r/s (1 900 r/min)
SAE J1349 Net, DIN 6271***	251 kW (341 hp)
Max torque at	20 r/s (1 200 r/min)
SAE J1995 Gross	1 700 Nm
SAE J1349 Net, DIN 6271***	1 689 Nm
Displacement total	9,4 l

With fan operating at full speed, the flywheel power is 238 kW (324 hp) and maximum torque is 1 589 Nm which corresponds to DIN 70020.

*) Meets Europe (EU) step 2.

**) Meets US (EPA) step 2, California (CARB) step 2 and Europe (EU) step 2.

**) with fan at normal speed.

Electrical system

All cables, sockets and pins are identified. Cables are enclosed in plastic conduit and secured to main frame.

Halogen lights. Prewired for options.

Connectors meet IP67 standard for watertightness as necessary.

Voltage	24 V
Battery capacity	2x170 Ah
Alternator	2,24 kW (80 A)
Starter motor	7 kW (9,4 hp)

Drivetrain

Volvo components, specifically designed for hauler applications.

Torque converter: Single stage with free wheeling stator and automatic lock up on all gears.

Transmission: Fully automatic planetary transmission with six forward gears and two reverse gears, with an integral variable hydraulic retarder.

Dropbox: Volvo design, single stage.

Axles: Volvo design with fully floating axle shafts and planetary type hub reductions.

Differential locks: One longitudinal and three transverse with 100% lock-up function, operator selectable on the move.

Configuration: 6x4 or 6x6 drive, operator selectable on the move.

	A25D	A30D
Torque converter.....	2,37:1	2,37:1
Transmission, Volvo	PT 1562	PT 1562
Dropbox.....	IL 1	IL 1
Axles, Volvo	AH 56	AH 64

Speed:

Forward	
1	8 km/h
2	12 km/h
3	22 km/h
4	31 km/h
5	40 km/h
6	53 km/h
Reverse	
1	8 km/h
2	13 km/h

Brake system

Dual circuit system with air-hydraulic disc brakes. Complies with ISO 3450 and SAE J1473 at total machine weight.

Service brakes: Dry discs on all wheels.

Circuit division: One circuit for front axle and one for bogie axles.

Parking brake: Spring-applied disc brake on the propeller shaft, designed to hold a loaded machine on a grade up to 18%. When the parking brake is applied, the longitudinal differential is locked.

Compressor: Gear driven by engine transmission.

Retarder: Hydraulic, infinitely variable, integrated in transmission.

Total retarding capability including transmission retarder and exhaust retarder, see graph.

Steering system

Hydromechanical self-compensating articulated steering for safe and accurate high speed hauling. Fast acting, low effort steering with 3,4 turns lock-to-lock for slow speed manoeuvrability.

Cylinders: Two double-acting steering cylinders.

Supplementary steering: Complies with ISO 5010 at total machine weight.

Steering angle: ±45°

Suspension

Volvo's unique maintenance free 3-point suspension system. The axles are suspended at three points, which results in independent movement needed in rough terrain.

Front axle: One hollow rubber spring on each side. A cross stay provides the stability. Two shock absorbers on each side.

Bogie: Volvo's unique terrain bogie permits long suspension travel and independent wheel movement, keeps the rear frame level.

Cab

Volvo cab, designed for high operator visibility, ergonomics and comfort. Wide threshold-free door opening and ergonomic instep. Isolation rubber pads to reduce vibrations. Tilt/ telescopic steering wheel. Overhead console for radio and storage. Dash-mounted Operator's Communication System. Storage bins.

Standard: ROPS/FOPS tested and approved. (ISO 3471, SAE J1040) / (ISO 3449, SAE J231) standards.

Heater and defroster: Filtered fresh air, four speed fan and pressurized cab to maintain a clean operating environment. Multi-level air outlets and separate defroster vents for all windows.

Operator's seat: Adjustable operator's seat with flameproof upholstery. Retractable seat belt.

Internal sound level, ISO 6396 74 dB (A)

Hydraulic system

Load-sensing variable displacement piston pumps that consume power only when needed.

Pumps: Five engine driven variable displacement, load sensing piston pumps, driven by the flywheel PTO. One ground-dependent piston pump for supplemental steering mounted on the dropbox.

Filter: One fiber glass filter with magnetic core.

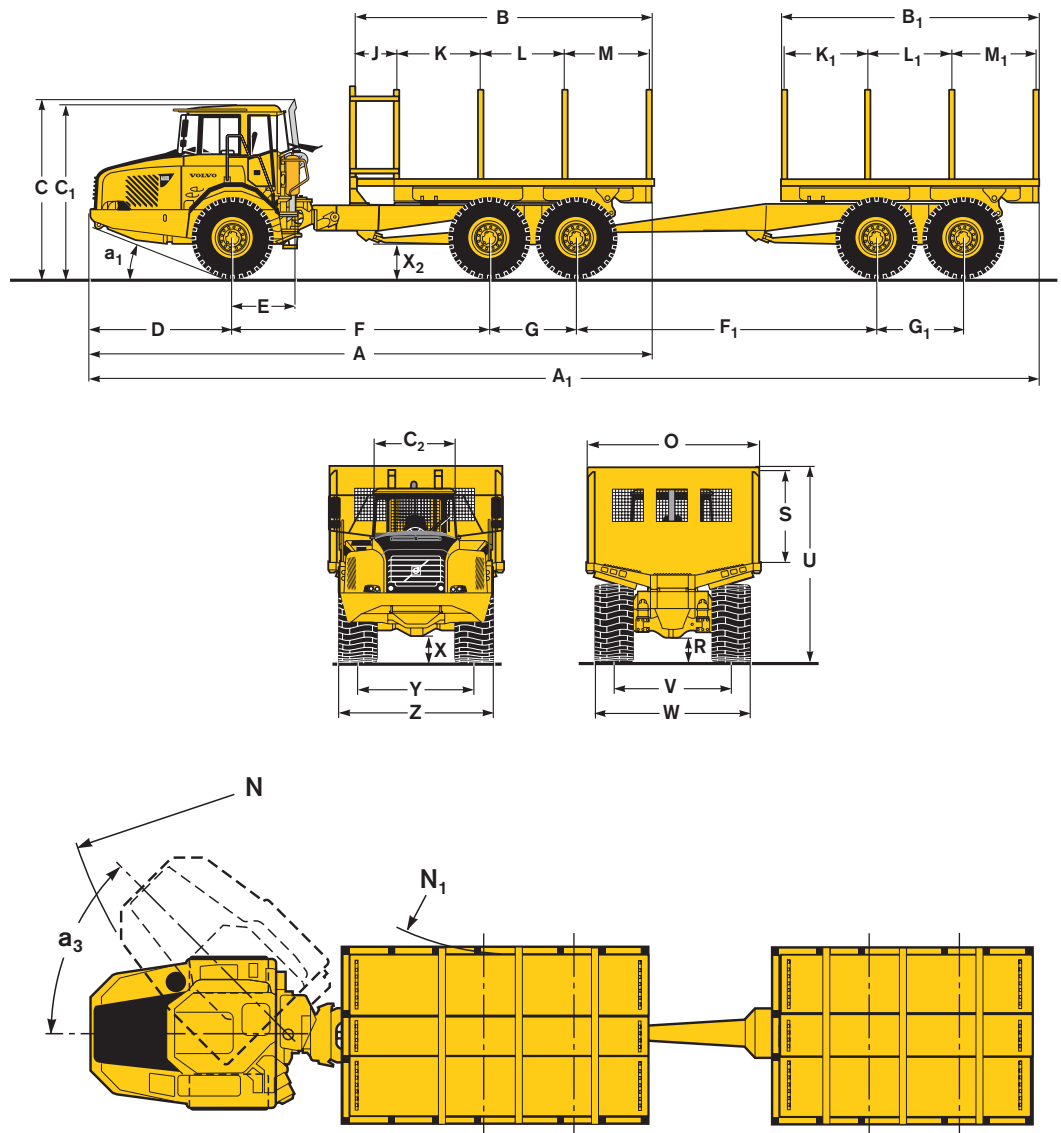
Pump capacity per pump:

Engine dependent.....	105 l/min
Ground dependent	142 l/min
at shaft speed	52,5 r/s (3 150 r/min)
Working pressure.....	25 MPa

Weights					Ground Pressure		
Operating weight includes all fluids and operator.					At 15% sinkage of unloaded radius and specified weights.		
Tires	A25D TC42	A25D TC50	A30D TC42	A30D TC50	Tires	A25D	A30D
	23.5R25 650/65R25	23.5R25 650/65R25	750/65R25	750/65R25		23.5R25 650/65 R25	750/65R25
Operating weight unloaded					Unloaded		
Front	11 800 kg	11 980 kg	12 020 kg	12 2000 kg	Front	105 kPa	106 kPa
Rear	5 540 kg	5 660 kg	5 980 kg	6 100 kg	Rear	42 kPa	45 kPa
Total	17 340 kg	17 640 kg	18 000 kg	18 300 kg	Loaded		
Payload incl. superstructure	28 220 kg	27 920 kg	33 060 kg	32 760 kg	Front	122 kPa	127 kPa
Total weight					Rear	135 kPa	153 kPa
Front	14 140 kg	14 140 kg	14 990 kg	14 990 kg			
Rear	31 420 kg	31 420 kg	36 070 kg	36 070 kg			
Total	45 560 kg	45 560 kg	51 060 kg	51 060 kg			

Pos	Metric (mm)		Imperial (feet)	
	A25D	A30D	A25D	A30D
A	10 862	10 862	33'9"	33'9"
A ₁	18 368	18 368	16'3"	16'3"
B	5 752	5 752	17'6"	17'6"
B ₁	4 961	4 961		
C	3 428	3 428	11'3"	11'3"
C ₁	3 318	3 318	10'11"	10'11"
C ₂	1 768	1 768	5'10"	5'10"
D	2 764	2 764	9'1"	9'1"
E	1 210	1 210	3'12"	3'12"
F	4 975	4 975	13'8"	13'8"
F ₁	5 863	5 863		
G	1 670	1 670	5'6"	5'6"
G ₁	1 670	1 670		
J	829	829	9'4"	9'4"
K	1 620	1 620	7'2"	7'2"
K ₁	1 620	1 620		
L	1 620	1 620	2'3"	2'3"
L ₁	1 620	1 620		
M	1 626	1 626	21'8"	21'8"
M ₁	1 626	1 626		
N	9 110	9 110	26'7"	26'7"
N ₁	4 820	4 820	13'3"	13'3"
O	3 270	3 270	9'6"	9'6"
R	513	513	1'8"	1'8"
S	1 705	1 705		
U	3 676	3 676	10'10"	10'10"
V	2 216	2 216	7'3"	7'3"
W	2 941	2 941	9'8"	9'8"
X	456	456	1'6"	1'6"
X ₂	659	659	2'2"	2'2"
Y	2 216	2 216	7'3"	7'3"
Z	2 941	2 941	9'85"	9'85"
a ₁	23,5°	23,5°	23.5°	23.5°
a ₃	45°	45°	45°	45°

A30D: Unloaded machine with 750/65R25



STANDARD EQUIPMENT

Safety

ROPS/ FOPS protected cab
Service platform for ease of service
Anti-slip material on hood and fenders
Hazard lights
Horn
Protective grille for rear window
Rear view mirrors
Secondary steering
Retractable 3 inch safety belt
Steering joint locking assembly
Intermittent wiper control
Windshield washers

Comfort

Tilt/telescopic steering wheel
Cab heater with filtered fresh air and defroster
Overhead console for radio
Sun visor
Tinted glass
Can holder /storage tray
Cigarette lighter
Ashtray
Space for lunch cooler
Storage box

Engine

Direct injected, electronically controlled
Turbocharged, intercooled
Remote oil drainage plug
Remote oil filters ease of access
Preheater for easier cold starts

Electric system

55 A alternator
Battery disconnect switch
Extra 24 V socket for lunch cooler

Lights:

- Headlights
- Parking lights
- Direction indicators
- Rear lights
- Reverse lights
- Brake lights
- Cab lighting
- Instrument lighting

Operator information interface

Gauges:

- Speedometer
- Tachometer
- Brake pressure
- Fuel
- Transmission oil temperature

Warning lamps grouped and easy to read
Central warning (3 levels) for all vital functions
Central positioned information display:

- Automatic pre-start checks
- Operation information, easy-to-find menu
- Trouble shooting diagnostics
- Hour meter
- Clock
- Machine settings

Drivetrain

Automatic transmission
Torque converter with automatic lock-up
Drop box, single stage
Hydraulic variable retarder
6x4 or 6x6 operator selectable drive modes
100% longitudinal differential lock
100% differential locks in all axles

Brakes

Air-hydraulic disc brakes
Two circuit brake system
Parking brake on prop shaft

Tires

A25D: 23,5R25
A30D: 750/65R25

Other

Air drier

(* Special Standard Equipment)

OPTIONAL EQUIPMENT

Safety

Fire-extinguisher and first aid kit

Service and maintenance

Tool kit with tire inflation unit
Electrical hood opening

Engine

Extra air cleaner, heavy duty
Extra air cleaner, oil bath type
External emergency engine stop
Delayed engine stop
Electric engine heater (120V or 240V)
Engine and cab heater, diesel **
Fuel filter heater, electrical, 24V **
Fast fuel filling system *

Electrical

Work lights, roof mounted
Work lights, reverse, fender mounted
Work lights (distance lights) on cab roof **
Rotating beacon, collapsible mount
Rotating beacon, extra
Rotating beacon at rear end **
Reverse alarm
Rear vision system
Anti-theft system (prevents engine start)
Head lights for left hand side traffic
Alternator, heavy duty 80 A
Battery charger **
Jump start connection, NATO **
Back up light, extra **
Cab heater, electrical **

Cab

Air suspended, electrically heated operator's seat
Seat cover **
Instructor seat with safety belt
Electrically heated rear-view mirrors
Air conditioning
Radio installation kit
Radio
Cable kit for cab heater (120V or 240V)
Solar guard film
Washer and wiper for rear window **
Vandalism protection for cab windows **
Rear view mirror, close up **
Roof rack **

External

Mud flaps in front of bogie **
Mud flaps behind bogie **
Belly plates for trailer A-stay **

Tires

A25D: 750/65R25

Other

Synthetic hydraulic oil (biologically degradable)
Arctic oil kit
Toolbox
Dumping angle limitation (hydraulic) **
Non-skid chain modification, front unit **
Non-skid chain storing hooks **
Towing Hitch

Rear Frame

TC 50 Extension **

(* * Special Optional Equipment)

Under our policy of continual product improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

Construction Equipment

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